

# Renyu (Philip) Zhang

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CONTACT INFORMATION	New York University Shanghai 1555 Century Avenue Pudong, Shanghai, China, 200122	renyu.zhang@nyu.edu <a href="https://rphilipzhang.github.io/rphilipzhang/">https://rphilipzhang.github.io/rphilipzhang/</a>
EDUCATION	<b>Washington University in St. Louis, Olin Business School</b> Ph.D. Operations Management • Thesis: <b>Dynamic Pricing and Inventory Management: Theory and Applications</b> • Advisors: Nan Yang, Fuqiang Zhang  <b>Peking University, School of Mathematical Sciences</b> B.S. Mathematics	St. Louis, MO 05/2016     Beijing, China 07/2011
ACADEMIC POSITION	<b>New York University Shanghai</b> Assistant Professor of Operations Management NYU Global Network Assistant Professor  <b>New York University, Stern School of Business</b> Visiting Assistant Professor of Operations Management	Shanghai, China 09/2016- 07/2017-  New York, NY 06/2017-
NON-ACADEMIC POSITION	<b>Kwai</b> Economist & Tech Lead	Beijing, China 12/2018-
RESEARCH INTERESTS	<b>Methodologies</b> Reinforcement learning; optimization; game theory; matching; mechanism design; econometrics.  <b>Applications</b> Online platforms and marketplaces; sharing economy; social networks; sustainable operations; supply chain management; revenue management; dynamic pricing and inventory management.	
PUBLICATIONS	<ol style="list-style-type: none"><li>1. <b>Dynamic Pricing and Inventory Management under Inventory-Dependent Demand</b>, <i>Operations Research</i>, <b>62</b>(5), 2014, 1077-1094 (with Nan Yang).</li><li>2. <b>Dynamic Pricing and Inventory Management under Fluctuating Procurement Costs</b>, <i>Manufacturing &amp; Service Operations Management</i>, <b>17</b>(3), 2015, 321-334 (with Guang Xiao and Nan Yang).</li><li>3. <b>Dynamic Supply Risk Management with Signal-Based Forecast Multi-Sourcing, and Discretionary Selling</b>, <i>Production and Operations Management</i>, <b>26</b>(7), 2017, 1399-1415 (with Long Gao, Nan Yang, and Ting Luo).</li><li>4. <b>Trade-in Remanufacturing, Customer Purchasing Behavior, and Government Policy</b> <i>Manufacturing &amp; Service Operations Management</i>, <b>20</b>(4), 2018, 601-616 (with Fuqiang Zhang).<ul style="list-style-type: none"><li>- Finalist award in the <i>POMS College of Supply Chain Management 2015 Best Student Paper Competition</i></li></ul></li></ol>	
PAPERS UNDER REVIEW	<ol style="list-style-type: none"><li>5. <b>Competition and Coopetition for Two-sided Platforms</b> (with Maxime Cohen).<ul style="list-style-type: none"><li>- Honorable Mention in the <i>INFORMS Service Science Best Cluster Paper Award</i></li></ul></li></ol>	

6. **Data Aggregation and Demand Prediction** (with Maxime Cohen and Kevin Jiao).  
- Finalist in the *INFORMS Data Mining Section Best Paper Award*
  7. **Personalized Sales Targets with Customer Choices** (with Xiaolong Li, Ying Rong, and Huan Zheng).
  8. **Dynamic Pricing and Inventory Management in the Presence of Online Reviews** (with Nan Yang).
  9. **Dynamic Competition under Market Size Dynamics: Balancing the Exploitation-Induction Tradeoff** (with Nan Yang).
  10. **Competition on Inventory Availability and Price** (with Junfei Lei, Yugang Yu, and Fuqiang Zhang).
  11. **Social Nudges Boost Productivity on Online Platforms: Evidence from Field Experiments** (with Zhiyu Zeng, Hengchen Dai, Dennis Zhang, Max Shen, Zhiwei Xu, and Heng Zhang).
  12. **Comparative Statics Analysis of Inventory Management Models with Dynamic Pricing** (with Nan Yang).
  13. **Cold Start on Online Advertising Platforms: Data-Driven Algorithms and Field Experiments** (with Zikun Ye, Dennis Zhang, Heng Zhang, Xin Chen, and Zhiwei Xu).
- WORKS IN PROGRESS
14. **Carpool Services for Ride-sharing Platforms** (with Xuan Wang).
  15. **Recommender Systems on Platforms** (with Xuan Wang and Dennis J. Zhang).

INVITED SEMINARS	Shanghai Jiaotong University, Antai College of Economics and Management	09/2020
	New York University, Stern School of Business	09/2020
	Club Bear Online Seminar, Video link	07/2020
	University of Illinois at Chicago, College of Business Administration	10/2019
	Peking University, Guanghua School of Management	12/2018
	Sun Yat-sen University, Lingnan College	12/2018
	John Hopkins University, Carey Business School	11/2018
	New York University, Stern School of Business	11/2018
	Chinese University of Hong Kong, CUHK Business School	01/2018
	Sichuan University, School of Business	12/2017
	Washington University in St. Louis, Olin Business School	10/2017
	Hong Kong Polytechnique University, Faculty of Business	08/2017
	City University of Hong Kong, College of Business	08/2017
	Hong Kong University of Science and Technology, HKUST Business School	08/2017
	New York University, Stern School of Business	06/2017
	Singapore Management University, Lee Kong Chian School of Business	04/2017
	National University of Singapore, NUS Business School	04/2017
	University of Science and Technology of China, School of Management	03/2017
	Southeast University, School of Economics and Management	12/2016
	Tsinghua University, School of Economics and Management	12/2016
	Shanghai Jiaotong University, Antai School of Economics and Management	12/2016
	University of Toronto, Rotman School of Management	11/2016
	Nanjing University, School of Management and Engineering	09/2016
	Southwest University of Finance and Economics, School of Business Administration	07/2016
	Southwest Jiaotong University, School of Economics and Management	07/2016

	Shanghai University of Finance and Economics, School of Business Administration	02/2016
	New York University Shanghai	02/2016
	University of Texas at Dallas, Jindal School of Management	01/2016
	New York University, Stern School of Business	01/2016
	Chinese University of Hong Kong, SEEM Department	01/2016
	Hong Kong University of Science and Technology, HKUST Business School	01/2016
	Hong Kong University of Science and Technology, IELM Department	01/2016
	Hong Kong Polytechnique University, Faculty of Business	01/2016
	City University of Hong Kong, College of Business	01/2016
CONFERENCE TALKS	INFORMS Annual Meeting 2020	11/2020
	INFORMS Annual Meeting 2019	10/2019
	Data-Driven and Innovative Operations Workshop,	06/2019
	POMS-HK Conference 2019	01/2019
	Young Scholars' Forum on Management Science 2019	01/2019
	INFORMS Annual Meeting 2018	11/2018
	Operations Management under "Internet+" Environment	08/2018
	MSOM Conference 2018	07/2018
	Revenue Management and Pricing Annual Conference 2018	06/2018
	Revenue Management Workshop	05/2018
	POMS Conference 2018	05/2018
	POMS-HK Conference 2018	01/2018
	Young Scholars' Forum on Management Science 2017	12/2017
	INFORMS Annual Meeting 2017	10/2017
	MSOM Conference 2017	06/2017
	POMS-HK Conference 2017	01/2017
	INFORMS Annual Meeting 2016	11/2016
	CSAMSE Annual Conference 2016	07/2016
	Revenue Management and Pricing Annual Conference 2016	06/2016
	POMS Annual Meeting 2016	05/2016
	Decision Science Institute Annual Conference 2015	11/2015
	INFORMS Annual Meeting 2015	11/2015
	MSOM Annual Conference 2015	06/2015
	POMS Annual Meeting 2015	05/2015
	INFORMS Annual Meeting 2014	11/2014
	MSOM Annual Conference 2014	06/2014
	INFORMS Annual Meeting 2013	10/2013
	INFORMS Annual Meeting 2012	10/2012
HONORS, AWARDS, AND GRANTS	1. Finalist, <i>INFORMS Data Mining Section Best Paper Award</i> .	10/2019
	2. MSOM Meritorious Service Award 2018, 2019	04/2020
	3. Shanghai Young Eastern Scholar Program, PI, RMB 200,000/Year.	01/2019
	4. National Science Foundation of China, Young Scientist Program 71802133, PI, RMB 180,000. 01/2019-12/2021	
	5. Honorable Mention, <i>INFORMS Service Science Best Cluster Paper Award</i> .	10/2017

6. Shanghai Pujiang Talent Program 17PJC074, PI, RMB 100,000. 09/2017-08/2019
7. Finalist Award, *POMS College of Supply Chain Management Best Student Paper Competition*. 05/2015
8. First Prize Award, Chinese Mathematics Olympiad 10/2006

## TEACHING EXPERIENCES

### New York University Shanghai

#### Instructor

- Business Analytics Spring 2021
- Machine Learning for Business Fall 2020
- Business Analytics (Rating: 4.2/5, 4.8/5) Spring 2019
- Operations Management (Rating: 4.6/5) Spring 2019
- Business Analytics (Rating: 4.4/5, 4.7/5) Spring 2018
- Competitive Advantage from Operations (Rating: 3.8/5) Fall 2017
- Competitive Advantage from Operations (Rating: 4/5) Spring 2017
- Competitive Advantage from Operations (Rating: 4.6/5) Fall 2016

#### Business Honors Thesis Advisor

- Yiyi Zhang (2018), Yujia Ni (2018).

### Kwai

#### Internal Instructor

- Data Driven Optimization 05, 2020
- Operations Analytics 01-05, 2019

### Washington University in St. Louis, Olin Business School

#### Teaching Assistant

- Operations Management; Advanced Operations Strategy; Market Competition and Value Appropriation ; Operations Planning and Control.

## PROFESSIONAL SERVICES

### Journal Referee

*Management Science, Operations Research, Manufacturing & Service Operations Management, Marketing Science, Production and Operations Management, Transportation Research: Part B, Naval Research Logistics, European Journal of Operations Research, Omega, Journal of Management Science and Engineering, Applied Mathematical Modeling, Operational Research: An International Journal.*

### Competition Judge

MSOM Student Paper Competition (2017, 2018, 2019).

### Conference Committee and Session Chair

Session Chair:

- INFORMS 2018, POMS 2018, POMS-HK Conference 2018, POMS-HK Conference 2017, CSAMSE Conference 2016.

Sponsorships and Exhibits Committee member:

- POMS Annual Meeting 2016.

### Professional Organization Membership

INFORMS, MSOM, RMP, APS, POMS.

**Internal Services**

NYU Shanghai Candidate Weekend instructor.	03/2018
NYU Shanghai Business Honors program thesis advisor.	09/2017-
NYU Shanghai Operations Management Reading Group co-organizer.	03/2017-
NYU Shanghai Housing Subcommittee member.	11/2016-05/2019
NYU Shanghai Business Research Seminar coordinator.	09/2016-08/2017
NYU Shanghai Business Honors Program guest lecturer.	10/2016-
Olin Business School Operations Management PhD Seminar coordinator.	01/2013-12/2013

**CONSULTING  
EXPERIENCES****Cardinal Operations**

Parttime Scientist	09/2017-08/2018
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